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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,537	09/23/2003	Don Warburton	14374.106	2130
7590 02/04/2005				
ERIC L. MASCHOFF WORKMAN, NYDEGGER & SEELEY 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, UT 84111			EXAMINER XU, LING X	
			ART UNIT 1775	PAPER NUMBER

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,537

Applicant(s)

WARBURTON, DON

Examiner

Ling X. Xu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 9/23/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/31/2003.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Specification

1. The use of the trademarks "HPC/H02" and "HPC/H05" has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The generic terminology of the material known by the trade mark stated above was not provided in the specification. Appropriate correction is required.

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to provide proper antecedent basis for the subject matter recited in claims 7-8 and 23. There are no description on the emissive coating has an emissivity of about 0.6 or higher or 0.2 or lower.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claimed emissive coating which substantially comprising an inorganically bonded ceramic was not described sufficiently in the specification to enable one skilled in the art to make and use the invention.

The only example of the coating material is referred to trade names on paragraphs [0054]-[0055], which the generic terminology was not provided. The Examiner has searched the manufacturer's internet website and did not find the cited product information.

In addition, the specification also fails to provide any information as to the degree of the emissivity of the claimed emissive coating. Claims 7 and 23 recite that the emissivity is 0.6 or higher and claim 8 recites that the emissivity is 0.2 or lower, which were not supported in the specification.

It is very confusing as to what type of inorganically bonded ceramic is qualified as the claimed emissive coating since the specification does not provide sufficient description. It appears that any type of inorganically ceramic whether the emissivity is high or low can function as the claimed emissive coating.

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-15 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McManus (US 3,400,882).

With respect to claims 1-2 and 11-15, McManus discloses a vacuum chamber comprising a coating of ceramic material covers the interior of the ion pump chamber. The walls of the pump may be metallic material such as stainless steel. The ceramic coating may be any suitable ceramic for high vacuum environments and is not porous and has a glazed surface exposed to the interior of the vacuum chamber (col. 3, lines 60-75).

The preamble recitations of “use in an x-ray device ” in claim 1, “ use with a rotating anode” in claim 14 and “use with a stationary anode” in claim 15 place no positive limitations on the claimed component, it merely indicates the intended use of the component.

With respect to claims 4 and 17, the ceramic coating is considered to be a dielectric material.

With respect to claims 5-6, these two claims are product-by-process claims. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (MPEP 2113). “[E]ven though product – by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The

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patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 227 USPQ 964, 966.

With respect to claims 7-10 and 18-19, as stated above, the specification does not provide sufficient description specify the inorganically bonded ceramic for the claimed emissive coating. It appears that any type of inorganically ceramic whether the emissivity is high or low can function as the claimed emissive coating. The ceramic coating disclosed by McManus is considered to be the same as the claimed emissive coating and have the same properties such as those recited in claims 7-10 and 18-19. Or in the alternative, the claimed parameters/properties may be expressed differently and thus may be distinct from disclosed, it is incumbent upon applicants to establish that such difference is unobvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to employ the particular parameters as claimed, since it is well-established that merely selecting proportions and ranges is not patentable absent a showing of criticality. *In re Becket*, 33 USPQ 33, and *In re Russell*, 169 USPQ 426.

5. Claims 1-2 and 4-10 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bliesner (6,329,098).

With respect to claims 1-2, Bliesner discloses a component comprising stainless steel coated with an electrically insulating ceramic (col. 3, lines 1-30).

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The preamble recitation of “use in an x-ray device ” in claim 1 places no positive limitations on the claimed component, it merely indicates the intended use of the component.

With respect to claim 4, the ceramic coating disclosed by Bliesner is a dielectric material.

It is noted that claims 5-6 are product-by-process claims. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (MPEP 2113). “[E]ven though product – by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 227 USPQ 964, 966.

With respect to claims 7-10, as stated above, the specification does not provide sufficient description specify the inorganically bonded ceramic for the claimed emissive coating. It appears that any type of inorganically ceramic whether the emissivity is high or low can function as the claimed emissive coating. The ceramic coating disclosed by Blisner is considered to be the same as the claimed emissive coating and have the same properties such as those recited in claims 7-10. Or in the alternative, the claimed parameters/properties may be expressed differently and thus may be distinct from disclosed, it is incumbent upon applicants to establish that such difference is unobvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to employ the particular parameters as claimed, since it is well-established that merely selecting proportions and ranges is not patentable absent a showing of criticality. *In re Becket*, 33 USPQ 33, and *In re Russell*, 169 USPQ 426.

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6. Claims 3, 16 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over McManus, as applied to claims 1-2, 4-15 and 17-19 above, and further in view of Tormey et al. (US 5,725,808).

As stated above, McManus discloses the component comprising the same or similar structure as claimed.

McManus does not disclose the ceramic coating comprising oxide filler.

Tormey teaches the oxide filler to the ceramic which is used to coat on the metal substrate can reduced shrinkage and have a low firing temperature (col. 2, lines 45-60).

Therefore, it would have been obvious to one of ordinary skill in the art to add oxide filler to the ceramic coating of McManus in order to improve the properties of the ceramic coating such as reduced shrinkage and have a low firing temperature.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bliesner, as applied to claims 1-2 above, and further in view of Tormey et al. (US 5,725,808).

As stated above, Bliesner discloses the component comprising the same or similar structure as claimed.

Bliesner does not disclose the ceramic coating comprising oxide filler.

Tormey teaches the oxide filler to the ceramic which is used to coat on the metal substrate can reduced shrinkage and have a low firing temperature (col. 2, lines 45-60).

Therefore, it would have been obvious to one of ordinary skill in the art to add oxide filler to the ceramic coating of Bliesner in order to improve the properties of the ceramic coating such as reduced shrinkage and have a low firing temperature.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling X. Xu whose telephone number is 571-272-1546. The examiner can normally be reached on 8:00 - 4:30 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah D. Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ling X. Xu
Examiner
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